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10 April 1974

Study of Recreational Land and Open Space
Using SKYLAB Imagery
Monthly Progress Report, March 1974

EREP Investigation 443
NASA Contract NAS9-13283

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networks. In the absence of other sources of up-to-date photography, S190B coverage of the entire area of responsibility of a recreation agency would be valuable for general reference purposes, and this value would increase with the size of the agency's area of responsibility.

- Existing recreational facilities, such as golf courses, parks, stadiums, race tracks, and marinas can be detected and identified. If this interpretation is performed by someone familiar with the territory, the identification of individual sites is quite reliable and serves as an inventory of existing recreation supply.

- Repeated coverage of an area at intervals of about 1 year would make it possible to observe and measure land use trends. Such measurement would indicate open space potentially suitable as recreational land which is threatened by development pressure. It would also indicate trends in population growth, which constitute one type of information needed in estimating the growth of recreation demand.


- The photography can be used for initial selection of recreation sites. It provides necessary detail to identify significant vegetation and water features and to relate them to urban areas and transportation networks. In addition, it is possible to identify specific industrial or commercial installations, sewage treatment plants, and some types of air and water pollution which influence the suitability of adjacent recreation sites.

- The photography has only limited use for individual site planning of parks, golf courses and other recreation facilities. For geographically extensive sites, such as river valleys or scenic trails, however, it can provide useful information.

Next Reporting Period

The project will remain at a low level of activity till magnetic tapes of the test area are received.

Submitted by:


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Approved by:


Richard R. Legault
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Infrared and Optics Division

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Overall Status

Analysis and evaluation of SL-2 and SL-3 photography of the Southeast Michigan area have been completed for the present. Additional use of this photography will be made in conjunction with the analysis of computer tapes of the area.

Significant Results

SL90B photography has been studied to determine its utility for the analysis and evaluation of recreational land and open space. This evaluation was reviewed by Mr. Larry Peterson of the Lake Central Region, Bureau of Outdoor Recreation.

SL90B color photography has adequate resolution to detect or identify many natural and cultural features which are significant for the evaluation of recreational land and open space. Many of these features were recognized in the 5 August 1973 photography of Southeast Michigan (Frame 83-150). Since the photographic detail is not adequate to identify smaller features within the scene, such features can be identified most effectively by interpreters familiar with the territory. The effectiveness of the interpretation could be further improved if coverage were obtained at two or three different seasons so that such indicators as seasonal changes in vegetation cover or snow enhancement could aid the interpretation of land use and land cover.

The degree of detail which can be observed from SL90B photography makes it useful for the following purposes:

- The photography can be used to good advantage to obtain general familiarity with a large regional area, and to study inter-relationships of major natural and cultural features within the area, such as forests, water bodies, urban areas, and transportation